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ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,
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*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: DRYING PROCESS

(57) Abstract: The present invention relates to a method of drying biological and other labile samples so that they can be preserved as a highly viscous liquid. The method involves the steps of preparing a preservation sample by dissolving/suspending an active agent in a solution of a stabilising agent, subjecting the preservation sample to such temperature and pressure conditions that the preservation sample loses solvent by evaporation without freezing or bubbling to form a foam and removing solvent until the preservation sample dries to form a highly viscous liquid.

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INTERNATIONAL SEARCH REPORT

PCT/EP 03/12191

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N1/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 38 19 530 A (WESTPHAL GEB JAUCH CHRISTEL DR) 21 December 1989 (1989-12-21) whole document, in particular examples A, B and C, col.8, lines 2-4	1,2
X	US 4 863 865 A (FRANKS FELIX) 5 September 1989 (1989-09-05) whole document, in particular claim 1	1,2
X	US 5 149 653 A (ROSER BRUCE J) 22 September 1992 (1992-09-22) the whole document	1,2,4,5, 11-18
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

29 March 2004

Date of mailing of the international search report

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Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

PCT/EP 03/12191

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>CRAIG DUNCAN Q M ET AL: "The relevance of the amorphous state to pharmaceutical dosage forms: Glassy drugs and freeze dried systems"</p> <p>INTERNATIONAL JOURNAL OF PHARMACEUTICS (AMSTERDAM), vol. 179, no. 2, 15 March 1999 (1999-03-15), pages 179-207, XP002274233 ISSN: 0378-5173 whole document, in particular p.201, 4.2.3</p>	1-22
A	<p>WORRALL E E ET AL: "Xerovac: an ultra rapid method for the dehydration and preservation of live attenuated Rinderpest and Peste des Petits ruminants vaccines"</p> <p>VACCINE, BUTTERWORTH SCIENTIFIC. GUILDFORD, GB, vol. 19, no. 7-8, 22 November 2000 (2000-11-22), pages 834-839, XP004225402 ISSN: 0264-410X the whole document</p>	1-22

INTERNATIONAL SEARCH REPORT

PCT/EP 03/12191

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☒ Claims Nos.: 1, 2
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-22

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 1,2

Present claims 1 and 2 relate to a method defined by reference to a desirable characteristic or property, namely for claim 1: "b) subjecting the preservation sample to such temperature and pressure conditions so that the preservation sample loses solvent by evaporation, without freezing or bubbling involved in foam formation, to form a viscous liquid.

for claim 2 furthermore: c) further subjecting the preservation sample to such temperature and pressure conditions so that the viscous liquid dries to form a highly viscous liquid."

The claims cover all methods having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT for only a very limited number of such methods. An attempt is made to define the method by reference to a result to be achieved. Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the methods with clearly defined parameters for temperature and pressure such as claims 3-5.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

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